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NOTES & NEWS

Some Abnormal Chitons from Washington State

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The occurrence of abnormal specimens of chitons, having more or fewer than the usual eight valves, has been noted in the literature (Chace & Chace, 1930; Berry, 1935) for individuals of *Ischnochiton regularis* (Carpenter, 1855), *Lepidozona mertensi* (Middendorff, 1846), and *Nuttallina fluxa* (Carpenter, 1864), among West Coast species.

In recent months, the assiduous collecting of Emmeline (Mrs. A. R.) Wingard of Gig Harbor, Washington, has brought to light the following specimens, mostly from the Puget Sound area. Most show clearly the places where injuries have caused valves to grow together.

Tonicella lineata (Wood, 1815). Port Orchard, (Kitsap County), Washington; 38.5 mm long, 19.7 mm wide, in dry state. Valves 7 and 8 fused completely into an abnormally large tail valve.

Mopalia ciliata (Sowerby, 1840). Port Gamble (Kitsap County); 57 mm long, 24 mm wide. Seven-valved. Sixth-from-anterior valve with double slitting.

Mopalia hindsi (Reeve, 1847). Hadlock (Jefferson County); 66 mm long, 32 mm wide. Valves 7 and 8 fused, incompletely on the left side, where a deep scar runs to the mucro and an extra insertion-plate is visible.

Mopalia laevior Pilsbry, 1918. Tacoma Narrows; 56 mm long, 29.5 mm wide. Apparently valves 5 and 6 have fused, the only evidence being the greater length of the valve and doubling of the slits in the right side insertion-plate.

Mopalia laevior. Indian Island (Jefferson County); 35 mm long, 24 mm wide. Six-valved, all valves appearing normal.

Mopalia lignosa (Gould, 1846). Hadlock; 37 mm long, 20 mm wide. Seven-valved. It is not possible to tell which valves may have grown together.

Mopalia lignosa. Tacoma Narrows; 57 mm long, 31.2 mm wide. A very slight thickening shows that valves 6 and 7 have fused.

Mopalia muscosa (Gould, 1846). Hale Pass; 74 mm long, 37.5 mm wide. Valves 4 and 5 fused, incompletely, so that insertion-plates of both valves are present on the left side.

Mopalia muscosa. Fort Ward, Bainbridge Island (Kitsap County); 56 mm long, 29.7 mm wide. Six-valved. Valves 4 and 5 have fused, and valves 6 and 7. The first abnormal valve has paired insertion-plates; the second, doubled lateral slits. Both valves show doubling on one side of the row of tubercles defining the lateral area.

Mopalia swanii Carpenter, 1864. Tacoma Narrows; 42 mm long, 17.5 mm wide. Valves 7 and 8 incompletely fused.

Katharina tunicata (Wood, 1815). Neah Bay (Clallam County); 73.5 mm long (valves only). Valves 6 and 7 fused, the insertion-plates for both traceable on the right side.

Cryptochiton stelleri (Middendorff, 1846). Fort Ward; valves 5 and 6 almost completely coalesced (see Figure 1).

These chitons are in the private collection of Mrs. Wingard, who displayed them at the 1966 meeting of the

American Malacological Union, Pacific Division. All are in a state of dry preservation. Some have had the girdle

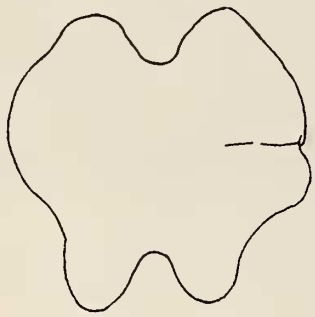

Figure 1

Abnormal Valve of *Cryptochiton stelleri* (Middendorff)
Dorsal View x 0.8

removed so that the effect of the abnormality on the articulamentum may be seen.

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A New Name for *Acmaea mitchelli* Lipps

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A. Myra Keen and James H. McLean have kindly informed me that *Acmaea mitchelli* Lipps, 1963, described from the Pleistocene of San Nicolas Island, California, is preoccupied by *Acmaea striata mitchelli* Oldroyd, 1933. A new name, *Acmaea edmitchelli,* is here proposed. The new name preserves the original intent of recognizing Ed Mitchell's contributions to the paleontology of the California Channel Islands.

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Confirmaton of *Haliotis sorenseni* Bartsch at Isla Guadalupe, Mexico

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Bartsch (1940, p. 50) described *Haliotis sorenseni* and reported it from "slightly south of Point Conception, California" and "some islands off shore probably Guadalupe." It seems not to have been cited since from Isla Guadalupe. A single adult specimen referable to this species recently presented to the Natural History Museum of San Diego by Dr. Carl L. Hubbs of Scripps Institution of Oceanography confirms Bartsch's record.

Dr. Hubbs reports that this specimen was recognized and picked up on "Barracks Beach" at Northeast Anchorage of Isla Guadalupe by David L. Leighton on February 28, 1965, while on a trip there supported by National Science Foundation Grant G.B.-508 to C. L. Hubbs. The soft parts of the animal were intact although a small fragment was newly broken from the anterior lip of the shell. Several specimens of *Balanus trigonis* Darwin, 1854 on the shell were identified by Dr. William A. Newman of Scripps Institution of Oceanography.

The bathymetric range of *Haliotis sorenseni* elsewhere is 15 to 150 feet or more, but mainly below 80 feet (Bartsch, 1940, p. 50; Cox, 1960, p. 398; 1962, p. 40). Dr. Hubbs speculates that the unusual presence on an uninhabited beach of a newly dead and broken abalone of probably deeper water origin than that in which divers commonly operate might be attributed to "collection by the northern elephant seal *Mirounga angustorostris* (Gill, 1866) which is abundant at this beach."